

What is claimed is:

- 1 1. A method for use in a database system, comprising:
2 defining a user-defined data type (UDT) with code according to an
3 interpreted programming language; and
4 storing a table containing at least one attribute according to the user-
5 defined data type.
- 1 2. The method of claim 1, further comprising defining a user-defined method
2 (UDM) associated with the UDT with code according to the interpreted programming
3 language.
- 1 3. The method of claim 2, further comprising executing the UDM with an
2 interpreter.
- 1 4. The method of claim 3, wherein executing the UDM with the interpreter
2 comprises executing the UDM with a virtual machine.
- 1 5. The method of claim 4, wherein executing the UDM with the virtual
2 machine comprises executing the UDM with a JAVA virtual machine.
- 1 6. The method of claim 1, wherein defining the UDT with code according to
2 the interpreted programming language comprises defining the UDT with code according
3 to one of JAVA and C#.
- 1 7. The method of claim 1, further comprising receiving a Structured Query
2 Language (SQL) statement to create the UDT, the SQL statement specifying a file
3 containing the code according to the interpreted programming language.
- 1 8. The method of claim 7, further comprising declaring a user-defined
2 method (UDM) in the statement to create the UDT.

1 9. The method of claim 8, further comprising receiving a second SQL
2 statement to create the UDM, wherein the second SQL statement specifies a file
3 containing code to define the UDM, the code according to the interpreted programming
4 language.

1 10. The method of claim 1, further comprising:
2 providing an interpreted programming language virtual machine to
3 provide a container for the UDT; and
4 *executing a routine to establish a connection from a database in the*
5 database system to the virtual machine.

1 11. The method of claim 10, further comprising providing an interface
2 between the database and the virtual machine.

1 12. The method of claim 11, wherein providing the interface comprises
2 providing a JAVA native interface.

1 13. The method of claim 10, further comprising receiving a Structured Query
2 Language (SQL) statement to create the UDT.

1 14. An article including at least one storage medium containing instructions
2 that when executed cause a database system to:
3 define a user-defined data type (UDT) with code according to an
4 interpreted programming language; and
5 store a table containing at least one attribute according to the user-defined
6 data type.

1 15. The article of claim 14, wherein the instructions when executed cause the
2 database system to define a user-defined method (UDM) associated with the UDT with
3 code according to the interpreted programming language.

1 16. The article of claim 15, wherein the instructions when executed cause the
2 database system to execute the UDM on an interpreted programming language virtual
3 machine.

1 17. The article of claim 14, wherein defining the UDT with code according to
2 the interpreted programming language comprises defining the UDT with code according
3 to one of JAVA and C#.

1 18. The article of claim 14, wherein the instructions when executed cause the
2 database system to receive a Structured Query Language (SQL) statement to create the
3 UDT, the SQL statement specifying a file containing the code according to the
4 interpreted programming language.

1 19. The article of claim 18, wherein the instructions when executed cause the
2 database system to declare a user-defined method (UDM) in the statement to create the
3 UDT.

1 20. The article of claim 19, wherein the instructions when executed cause the
2 database system to receive a second SQL statement to create the UDM, wherein the
3 second statement specifies a file containing code to define the UDM, the code according
4 to the interpreted programming language.

1 21. A database system comprising:
2 a storage to store code according to an interpreted programming language;
3 and
4 a controller to receive a database query to create a user defined data type
5 (UDT), the database query containing a clause identifying a storage location of the code
6 according to the interpreted programming language.

1 22. The database system of claim 21, wherein the code comprises JAVA
2 bytecode.

1 23. The database system of claim 21, wherein the code comprises code
2 corresponding to the C# language.

1 24. The database system of claim 21, further comprising an interpreter to
2 execute the code according to the interpreted programming language.

1 25. The database system of claim 24, the storage to store second code
2 according to the interpreted programming language, and the controller to further receive a
3 second database query to create a user-defined method (UDM) associated with the UDT,
4 the second database query identifying a location of the second code.

1 26. The database system of claim 25, the interpreter to execute the second
2 code.

1 27. The database system of claim 26, wherein the interpreter comprises a
2 virtual machine.

1 28. The database system of claim 21, the storage to further store a table
2 containing an attribute according to the UDT.